

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): ~~Method of~~ A system for transmitting data ~~on~~ over a physical resource, comprising: using

[[ - ]] a layer (RRC) ~~responsible for the management of~~ configured to manage the physical resource and ~~the~~ to guarantee of the a quality of service;

[[ - ]] a first sub-layer (RLC) ~~responsible for supplying~~ configured to supply a transmission support in accordance with the required quality of service and to segment the data into transmission units, the first sub-layer reducing a size of at least one of the transmission units when transmission conditions on the physical resource are degraded;

[[ - ]] a second sub-layer (MAC) ~~responsible for~~ configured ~~access to~~ transmit at least one of the transmission units over the physical resource during each of transmission time intervals, the transmission time interval being a periodic time interval during which the second sub-layer is allowed to access the physical resource; and

[[ - ]] a physical layer (PHY) ~~responsible for the physical processing~~ configured to perform error correction coding or decoding of the data, ; access to the physical resource being divided into transmission time intervals (TTI);

~~the sub-layer (RLC) being able to segment the data into transmission units (RLC PDU);~~

~~the sub-layer (MAC) being able to transmit at least one transmission unit per transmission time interval;~~

~~characterised in that, in the event of degradation of the transmission conditions on the physical resource, the size of the transmission units is reduced.~~

Claim 2 (Currently Amended): ~~Data transmission method according to~~ The system of claim Claim 1, wherein ~~characterised in that, at the start of a connection between a transmitter~~

~~and receiver accessing the physical resource,~~

the layer (RRC) determines a plurality of sizes of the ~~of possible~~ transmission units unit sizes for a the transmission time intervals interval (TTI) and in that the second sub-layer (MAC) selects, ~~from amongst this plurality,~~ a transmission unit size one of the plurality of sizes according to the transmission conditions, the second sub-layer selecting a smaller one of the plurality of sizes size being selected in the case of degradation of when the transmission conditions on the physical resource are degraded.

Claim 3 (Currently Amended): ~~Data transmission method according to~~ The system of claim Claim 1, characterised in that, at the start of a connection between a transmitter and receiver accessing the physical resource, the layer (RRC) ~~fixes~~ adjusts a first the size of each of the transmission units unit (RLC PDU) according to the transmission conditions and transmits it the size adjusted to the second sub-layer (MAC).

Claim 4 (Currently Amended): ~~Data transmission method according to~~ The system of claim Claim 3, characterised in that, wherein

~~in the case of degradation of the transmission conditions on the physical resource,~~ the layer (RRC) ~~fixes a second~~ reduces the size of each of the transmission units unit (RLC PDU) ~~less than the first and transmits it to the sub-layer (MAC)~~ when the transmission conditions on the physical resource are degraded.

Claim 5 (Currently Amended): ~~Data transmission method according to one~~ The system of claim 1 Claims 1 to 4, characterised in that wherein

the layer (RRC) guarantees a the quality of service by assigning a set level  $SIR_q$  to the ratio of received signal power to noise plus interference,  $[[;]]$

in the case of degradation of the transmission conditions the transmission power of the  
a transmitter is increased so as to maintain the quality of service, and [[:]]

the size of each of the transmission units ~~unit (RLC PDU)~~ is reduced when the  
transmission power reaches a maximum value.

Claim 6 (Currently Amended): ~~Data transmission method according to~~ The system of  
claim ~~Claims 4 and 5, characterised in that~~ wherein

the layer (RRC) allocates resources by lowering the set level  $SIR_t$  of a service according  
to the inverse of its a degree of priority of the service.

Claim 7 (Currently Amended): ~~Data transmission method according to one of the~~  
~~preceding claims, characterised in that~~ The system of claim 1 wherein

the layer (RLC) ~~functions~~ is configured to retransmit the transmission units in an  
~~acknowledged mode, a transmission unit being retransmitted if the acknowledgement is not~~  
received.

Claim 8 (Currently Amended): A UMTS mobile telephony system using ~~a data~~  
~~transmission method according to~~ the system of one of the preceding claims claim 1.

Claim 9 (Currently Amended): ~~Mobile~~ The system of claim 2 ~~mobile telephony~~  
~~system according to Claim 8 using a data transmission method according to Claim 2,~~  
~~characterised in that~~ wherein

the layer (RRC) supplies to the second sub-layer (MAC) the plurality of ~~possible~~ sizes  
by means of the TFCS a table.

Claim 10 (Currently Amended): ~~Mobile telephony system according to Claim 8 using a data transmission method according to Claim 4, characterised in that~~ The system of claim 4, wherein

the layer (RRC) ~~fixes~~ adjusts ~~a second size~~ the plurality of sizes of ~~for~~ the transmission units ~~unit~~ by sending a new TFCS table to the second sub-layer (MAC).

Claim 11 (New): The system of claim 2 wherein

the layer guarantees the quality of service by assigning a set level to the ratio of received signal power to noise plus interference,

in the case of degradation of the transmission conditions the transmission power of a transmitter is increased so as to maintain the quality of service, and

the size of each of the transmission units is reduced when the transmission power reaches a maximum value.

Claim 12 (New): The system of claim 3 wherein

the layer guarantees the quality of service by assigning a set level to the ratio of received signal power to noise plus interference,

in the case of degradation of the transmission conditions the transmission power of a transmitter is increased so as to maintain the quality of service, and

the size of each of the transmission units is reduced when the transmission power reaches a maximum value.

Claim 13 (New): The system of claim 4 wherein

the layer guarantees the quality of service by assigning a set level to the ratio of received signal power to noise plus interference,

in the case of degradation of the transmission conditions the transmission power of a transmitter is increased so as to maintain the quality of service, and

the size of each of the transmission units is reduced when the transmission power reaches a maximum value.

Claim 14 (New): The system of claim 5, wherein  
the layer allocates resources by lowering the set level of a service according to the inverse of a degree of priority of the service.

Claim 15 (New): The system of claim 11, wherein  
the layer allocates resources by lowering the set level of a service according to the inverse of a degree of priority of the service.

Claim 16 (New): The system of claim 12, wherein  
the layer allocates resources by lowering the set level of a service according to the inverse of a degree of priority of the service.

Claim 17 (New): The system of claim 13, wherein  
the layer allocates resources by lowering the set level of a service according to the inverse of a degree of priority of the service.

Claim 18 (New): The system of claim 2 wherein  
the layer is configured to retransmit the transmission units if acknowledgement is not received.

Claim 19 (New): The system of claim 3 wherein  
the layer is configured to retransmit the transmission units if acknowledgement is not  
received.

Claim 20 (New): The system of claim 4 wherein  
the layer is configured to retransmit the transmission units if acknowledgement is not  
received.

Claim 21 (New): The system of claim 5 wherein  
the layer is configured to retransmit the transmission units if acknowledgement is not  
received.

Claim 22 (New): The system of claim 6 wherein  
the layer is configured to retransmit the transmission units if acknowledgement is not  
received.

Claim 23 (New): The system of claim 11 wherein  
the layer is configured to retransmit the transmission units if acknowledgement is not  
received.

Claim 24 (New): The system of claim 12 wherein  
the layer is configured to retransmit the transmission units if acknowledgement is not  
received.

Claim 25 (New): The system of claim 13 wherein

the layer is configured to retransmit the transmission units if acknowledgement is not received.

Claim 26 (New): The system of claim 14 wherein  
the layer is configured to retransmit the transmission units if acknowledgement is not received.

Claim 27 (New): The system of claim 15 wherein  
the layer is configured to retransmit the transmission units if acknowledgement is not received.

Claim 28 (New): The system of claim 16 wherein  
the layer is configured to retransmit the transmission units if acknowledgement is not received.

Claim 29 (New): The system of claim 17 wherein  
the layer is configured to retransmit the transmission units if acknowledgement is not received.